

Amendments to the Claims

Please add new Claims 56-73. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1-32. (Canceled)

33. (Previously Presented) A method of maintaining hair growth in a vertebrate comprising contacting the keratinocytes of the vertebrate with a ligand or pseudo-ligand that binds to keratinocyte p75 nerve growth factor receptors, thereby inhibiting apoptosis, and maintaining hair growth.

34. (Previously Presented) The method of Claim 33 wherein the ligand is a biologically active fragment of nerve growth factor.

35. (Previously Presented) The method of Claim 33 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.

36. (Previously Presented) The method according to Claim 35 wherein the peptide is selected from the group consisting of SEQ ID NO: 4, 9 and 10.

37-44. (Canceled)

45. (Withdrawn) A method of treating alopecia areata in a human, said method comprising contacting keratinocytes in the skin of the human with a ligand or pseudo-ligand of p75 nerve growth factor receptor, in an amount sufficient to inhibit apoptosis, thereby maintaining hair growth.

46. (Withdrawn) The method of Claim 45 wherein the ligand is a biologically active fragment of nerve growth factor.
47. (Withdrawn) The method of Claim 45 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.
48. (Withdrawn) The method according to Claim 47 wherein the peptide is selected from the group consisting of SEQ ID NO: 4, 9 and 10.
49. (Withdrawn) A method of treating a human with male pattern baldness, comprising contacting the keratinocytes in the human with a pseudo-ligand or ligand of p75 nerve growth factor receptor, in an amount sufficient to inhibit apoptosis, thereby inhibiting apoptosis, and maintaining hair growth.
50. (Withdrawn) The method of Claim 49 wherein the ligand is a biologically active fragment of nerve growth factor that binds to the p75 nerve growth factor receptor.
51. (Withdrawn) The method of Claim 49 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.
52. (Withdrawn) The method according to Claim 51 wherein the peptide is selected from the group consisting of SEQ ID NO: 4, 9 and 10.
53. (Previously Presented) The method of Claim 33 wherein the pseudo-ligand is an antibody.
54. (Withdrawn) The method of Claim 45 wherein the pseudo-ligand is an antibody.
55. (Withdrawn) The method of Claim 49 wherein the pseudo-ligand is an antibody.

56. (New) A method of delaying hair loss in a vertebrate, said method comprising contacting the keratinocytes of the vertebrate with a ligand or pseudo-ligand that binds to keratinocyte p75 nerve growth factor receptors, thereby inhibiting apoptosis, and delaying hair loss.
57. (New) The method of Claim 56 wherein the ligand is a biologically active fragment of nerve growth factor.
58. (New) The method of Claim 56 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.
59. (New) The method according to Claim 58 wherein the peptide is SEQ ID NO:4.
60. (New) The method according to Claim 58 wherein the peptide is SEQ ID NO:9.
61. (New) The method according to Claim 58 wherein the peptide is SEQ ID NO:10.
62. (New) A method of inhibiting apoptosis in keratinocytes of a vertebrate, said method comprising contacting the keratinocytes of the vertebrate with a ligand or pseudo-ligand that binds to keratinocyte p75 nerve growth factor receptors, thereby inhibiting apoptosis in the keratinocytes.
63. (New) The method of Claim 62 wherein the ligand is a biologically active fragment of nerve growth factor.
64. (New) The method of Claim 62 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.
65. (New) The method according to Claim 64 wherein the peptide is SEQ ID NO:4.

66. (New) The method according to Claim 64 wherein the peptide is SEQ ID NO:9.
67. (New) The method according to Claim 64 wherein the peptide is SEQ ID NO:10.
68. (New) A method of maintaining hairs of a vertebrate in the anagen phase, said method comprising contacting the keratinocytes of the vertebrate with a ligand or pseudo-ligand that binds to keratinocyte p75 nerve growth factor receptors, thereby inhibiting apoptosis, and maintaining the hairs in the anagen phase
69. (New) The method of Claim 68 wherein the ligand is a biologically active fragment of nerve growth factor.
70. (New) The method of Claim 68 wherein the pseudo-ligand is a peptide comprising the amino acid sequence lysine-glycine-alanine.
71. (New) The method according to Claim 70 wherein the peptide is SEQ ID NO:4.
72. (New) The method according to Claim 70 wherein the peptide is SEQ ID NO:9.
73. (New) The method according to Claim 70 wherein the peptide is SEQ ID NO:10.